

ARIZONA DEPARTMENT OF WATER RESOURCES
OFFICE OF ASSURED AND ADEQUATE WATER SUPPLY
500 NORTH THIRD STREET
PHOENIX, ARIZONA 85004-3921
(602) 417-2465

APPLICATION FOR A PHYSICAL AVAILABILITY DEMONSTRATION

(Refer to application guidelines for assistance in completing this form)

PART A - GENERAL INFORMATION

1. Applicant Name: _____
Phone: _____ Facsimile: _____ E-mail: _____
Address: _____
Applicant is: ☐ Land Owner ☐ Other: _____
2. Name of Study Area: _____
3. Location: _____

Township	Range	Section(s)	County	AMA (if applicable)
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4. Consultant Name: _____
Phone: _____ Facsimile: _____ E-mail: _____
Address: _____
5. Application is for: ☐ New study ☐ Update, study previously reviewed by the Department
6. Attach a map of the study area (or include in hydrologic study)
7. Size of study area: _____ acres

PART B - WATER DEMAND INFORMATION

1. Expected year of build-out: _____
2. Total demand projected for study area at build-out: _____ AF/Year
Residential demand: _____ AF/Year
Non-residential demand: _____ AF/Year
Type of non-residential uses: _____
3. Assumptions used in calculating water demand in Item 2: _____

PART C - WATER SUPPLY INFORMATION

1. Please indicate source(s) of water to be used: ☐ Groundwater ☐ Surface Water ☐ Effluent
(If the sources includes non-groundwater supplies, please complete "Supplement C.")
2. a. Proposed method of water distribution: ☐ Dry lot (individual wells) ☐ Central distribution system
b. Water provider name: _____ ☐ Existing ☐ Proposed

3. Generally describe any storage or treatment facilities (for surface water or effluent) which will serve this development. Indicate whether the facilities are planned or existing. If planned, indicate the anticipated completion date(s): _____
4. Provide a detailed hydrologic study, consistent with Department guidelines, and submit with this application.

PART D - FEES

The application fee for a Demonstration of Physical Availability \$1,000.00. The payment may be made by cash, check, or in some cases, by entry in an existing Department fee credit account. Checks should be made payable to the Department of Water Resources. **Failure to enclose the required fees will cause the application to be returned.**

I DO HEREBY certify that the information contained in this application and all information accompanying it is true and correct to the best of my knowledge and belief.

Owner Name and Title (Please type or print)

Signature

Date

ARIZONA DEPARTMENT OF WATER RESOURCES
OFFICE OF ASSURED WATER SUPPLY
500 NORTH THIRD PLACE
PHOENIX, ARIZONA 85004
(602) 417-2465

APPLICATION FOR ASSURED WATER SUPPLY OR WATER ADEQUACY
SUPPLEMENT 'C'

Source of Supply	100 Year Volume (acre feet)	Required Supporting Information (reference any attached documents)
Surface Water Directly Delivered (except CAP or Colorado River Water) <i>(also include water stored and recovered in the same year, but not long-term storage credits)</i>		Hydrologic study demonstrating physical availability of water to be diverted (attachment): _____ Surface water right number(s) and type(s) or water district name: _____ Will a demonstration of backup supplies or a drought response plan be submitted? __Yes __No If yes, reference attachment: _____
CAP or Colorado River Water Directly Delivered <i>(also include water stored and recovered in the same year, but not long-term storage credits)</i>		Will a demonstration of backup supplies or a drought response plan be submitted? __Yes __No If yes, reference attachment: _____ _____
Effluent Directly Delivered <i>(also include water stored and recovered in the same year, but not long-term storage credits)</i>		Name of entity providing effluent: _____ _____ Any related contracts or agreements (attachment): _____
Groundwater <i>(Do not include storage project credits)</i>		Indicate any grandfathered groundwater right or permit number(s) and type(s): _____ Hydrologic study demonstrating physical availability and quality of water to be withdrawn (attachment): _____
Existing Long-Term Storage Credits <i>(From all sources)</i>		Long-Term Storage Credit account number 70-_____ _____ Hydrologic study demonstrating physical availability of water to be recovered from outside of the area of hydrologic impact (attachment): _____
Anticipated Long-Term Storage Credits <i>(From all sources)</i>		Water storage permit number: 73-_____ Existing facility? __Yes __No Water storage permit number: 73-_____ Existing facility? __Yes __No Hydrologic study demonstrating physical availability of water to be recovered from outside of the area of hydrologic impact (attachment): _____ Evidence of physical, legal and continuous availability of the water to be stored (attachment): _____

APPLICATION GUIDELINES SUPPLEMENT 'C'

Attach and reference any supporting studies or other documents indicated in the table. General guidance for water sources and volumes, hydrologic studies, backup supply plans and drought response plans are provided below. If more detail is required to demonstrate sources and types of water, an alternative table may be submitted (in a clear and concise format).

Water Sources and Volumes

The 100 year volume should include the total water from each source expected to be used over the 100 year period, regardless of the actual or expected term of usage. For example, the 100 year volume for a 30 year contract for 200 acre feet of effluent is 6,000 acre-feet.

Surface Water, CAP/Colorado River Water and Effluent Directly Delivered:

Include the amounts from each of these sources that will be directly delivered. For purposes of this table "directly delivered" includes amounts stored and recovered in the same calendar year. Amounts stored in one year and recovered in a later year should be accounted for under "Existing Long-Term Storage Credits" or "Anticipated Long-Term Storage Credits."

Groundwater:

The figure for groundwater could include the basic groundwater allocation (which varies between AMAs) plus: 1) any credits for extinguishment of grandfathered rights; 2) incidental recharge (figured at 4 percent of total demand); and 3) for members of the Central Arizona Groundwater Replenishment District, any groundwater which is to be replenished by the District on the member's behalf. (If the applicant intends to demonstrate an Assured Water Supply solely on the basis of membership in the District, the amount indicated in the "100 year volume" column should equal total projected demand for the 100 year period.)

Long-Term Storage Credits (Existing or Anticipated):

Do not include water stored and recovered in the same year (this water should be accounted for under the origin source).

Hydrologic Studies

Hydrologic studies involve a site-specific evaluation of surface water and groundwater characteristics including water levels, water decline rates, flow rates, flow direction and water quality. These studies provide for conclusions regarding the impact of the proposed withdrawals or diversions, and the quantity and quality of water available. The various studies referenced in the "source of supply" table for appropriate supplies should be combined into one comprehensive hydrologic report.

The rules require that a study must describe the hydrology of the "affected area" using a "method of analysis approved by the director." The "affected area" for a city, town or private water company is the area delineated by the current exterior service area boundaries plus: 1) recorded subdivisions for which commitments to serve have been executed; 2) any nearby areas where the depth to water criteria may be exceeded; and 3) any nearby areas containing water that does not meet state water quality standards. "Method of analysis approved by the director" refers to guidelines for hydrologic studies prepared by the Department's Hydrology Division, or an alternative method that has been presented to and approved by the Department. Detailed hydrologic study guidelines are available through the Hydrology Division (602) 417-2448.

For purposes of determining physical availability of groundwater, the following factors must be considered:

- the groundwater allowance
- incidental recharge
- credits for extinguished grandfathered rights
- long-term storage credits (regardless of the origin source)
- any water stored and recovered in the same year when recovery occurs outside of the area of hydrologic impact

- all groundwater which is subject to replenishment by the Central Arizona Groundwater Replenishment District.

Backup Water Supply

Backup water supplies must be demonstrated if:

- 1) The proposed source of water is surface water (not including CAP or Colorado River water) and the applicant wishes to have the Department calculate the quantity of water annually available for the proposed use at 100 percent of the median flow of the source (instead of 120% of firm yield of the source);
- 2) The proposed source of water is a CAP subcontract (other than a non-declining, long-term municipal and industrial subcontract or a lease for Indian priority CAP water) and the applicant wishes to have the Department calculate the quantity of water annually available for the proposed use at 100 percent of the subcontract amount (instead of a lesser amount to be determined by the Director);
- 3) The proposed source of water is Colorado River water based on a contract which is less reliable than CAP municipal and industrial water, and the applicant wishes to have the Department calculate the quantity of water annually available for the proposed use at 100 percent of the contract amount (instead of a lesser amount to be determined by the Director).

A backup water supply may be demonstrated through one or more of the following:

- A drought response plan (see guidelines below)
- Long-term storage credits
- A contract for water with the Central Arizona Groundwater Replenishment District or a county water augmentation authority
- Evidence that the applicant is a member of the Central Arizona Groundwater Replenishment District or a county water augmentation authority
- Evidence of other backup supplies which are physically, continuously, and legally available.

Drought Response Plan

A Drought Response Plan is one of five options available for demonstrating a backup supply of water. In addition, a Drought Response Plan is one of several means to support the demonstration of continuous physical availability of surface water, Central Arizona Project water or Colorado River water where insufficient storage facilities exist.

The Drought Response Plan should describe a variety of conservation and augmentation measures, which the provider will employ during a water supply shortage. The plan may include:

- An identification of priority water uses consistent with appropriate public policy
- A description of sources of emergency water supplies
- An analysis of the potential use of water pressure reduction
- Plans for public education and voluntary water use reduction
- Plans for water use bans, restrictions and rationing
- Plans for water pricing and penalties for excess water use
- Plans for coordination with other cities, towns and private water companies
- Any other appropriate measures.

The Drought Response Plan should describe any physical structures and reference any current contracts, agreements or special authorizations necessary to implement the measures.

For more information:

- . General assistance:
 - Office of Assured and Adequate Water Supply
 - (602) 417-2465

- . Assistance with Groundwater Replenishment District membership:
 - Central Arizona Groundwater Replenishment District
 - (623) 869-2333

- . Assistance with calculating demand:
 - Phoenix AMA - (602) 417-2465
 - Tucson AMA - (520) 770-3800
 - Pinal AMA - (520) 836-4857
 - Prescott AMA - (928) 778-7202
 - Santa Cruz AMA - (520) 761-1814

- . Hydrologic studies
 - Assured Water Supply Unit
 - (602) 417-2448

- . Water Quality
 - Superfund/WQARF Remedial Actions
 - (602) 417-2473